WHAT IS CLAIMED IS:

1. A composition for topical application of methylphenidate, comprising methylphenidate and a pharmaceutically acceptable adhesive in a flexible, finite system, wherein said composition delivers methylphenidate in an amount and rate sufficient to increase the methylphenidate plasma concentration of a subject being treated over a period of about 6-16 hours, followed by a steady decrease in the plasma concentration of methylphenidate.

2. The composition according to claim 1, wherein said increase in said methylphenidate plasma concentration is followed by a steady decrease in the plasma concentration of methylphenidate over a period of at least about 8 hours.

3. The composition according to claim 1, wherein said increase in said methylphenidate plasma concentration occurs over a period of about 6-12 hours.

4. The composition according to claim 1, wherein said increase in said methylphenidate plasma concentration is in the range of 0.06 (ng/mL)/hour to 6.0 (ng/mL)/hour.

5. The composition according to claim 1, wherein said increase in said methylphenidate plasma concentration is in the range of 0.4 (ng/mL)/hour to 2.5 (ng/mL)/hour.

6. The composition according to 1, wherein said composition comprises no more than about 5% weight/weight of acid functional monomers.

7. The composition according to claim1, wherein said composition is substantially free of ritalinic acid at the time of manufacture.

8. The composition according to claim 1, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 24 hours.

9. The composition according to claim 1, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 18 hours.

10. The composition according to claim 1, wherein the methylphenidate is delivered at a rate of about at least 5 mg per 24 hours.

11. A composition for topical application of methylphenidate, comprising methylphenidate and a pharmaceutically acceptable adhesive in a flexible, finite system,

(i) wherein said composition comprises about 10 to 30 wt% methylphenidate, about 30 to 50 wt% acrylic adhesive, and about 30 to 50 wt% silicone adhesive and

(ii) wherein said composition delivers methylphenidate in an amount and rate sufficient to increase the methylphenidate plasma concentration of a subject being treated over a period of about 6-16 hours, followed by a steady decrease in the plasma concentration of methylphenidate.

12. The composition according to claim 11, wherein said increase in said plasma concentration over about 6-16 hours is followed by a steady decrease in the plasma concentration of methylphenidate over a period of at least about 8 hours.

13. The composition according to claim 11, wherein said increase in said methylphenidate plasma concentration occurs over a period of about 6-12 hours.

14. The composition according to claim 11 wherein said increase in said methylphenidate plasma concentration is in the range of 0.06 (ng/mL)/hour to 6.0 (ng/mL)/hour.

15. The composition according to claim 11, wherein said composition comprises no more than about 5% weight/weight of acid functional monomers.

16. The composition according to claim 11, wherein said composition is substantially free of ritalinic acid at the time of manufacture.

17. The composition according to claim 11, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 24 hours.

18. The composition according to claim 11, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 18 hours.

19. The composition according to claim 11, wherein the methylphenidate is delivered at a rate of about at least 5 mg per 24 hours.

20. A method of treating attention deficit disorder and attention deficit/hyperactivity disorder comprising topically administering a composition of methylphenidate and a pharmaceutically acceptable adhesive in a flexible, finite system, wherein said composition delivers methylphenidate in an amount and rate sufficient to increase the methylphenidate plasma concentration of a subject being treated over a period of about 6-16 hours, followed by a steady decrease in the plasma concentration of methylphenidate.

21. The method according to claim 20, wherein the increasing plasma concentration over about 6-16 hours is followed by a steady decrease in the plasma concentration of methylphenidate over a period of at least about 8 hours.

22. The method according to claim 20, wherein said increase in said methylphenidate plasma concentration is in the range of 0.06 (ng/mL)/hour to 6.0 (ng/mL)/hour.

23. The method according to claim 20, wherein said increase in said methylphenidate plasma concentration is in the range of 0.4 (ng/mL)/hour to 2.5 (ng/mL)/hour.

24. The method according to claim 20, wherein said composition comprises no more than about 5% weight/weight of acid functional monomers.

25. The method according to claim 20, wherein said composition is substantially free of ritalinic acid at the time of manufacture.

26. The method according to claim 20, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 24 hours.

27. The method according to claim 20, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 18 hours.

28. The method according to claim 20, wherein the methylphenidate is delivered at a rate of about at least 5 mg per 24 hours.

29. A method of treating attention deficit disorder and attention deficit/hyperactivity disorder comprising topically administering a

composition of methylphenidate, and a pharmaceutically acceptable adhesive in a flexible, finite system,

(i) wherein said composition comprises about 10 to 30 wt% methylphenidate, about 30 to 50 wt% acrylic adhesive, and about 30 to 50 wt% silicone adhesive and

(ii) wherein said composition delivers methylphenidate in an amount and rate sufficient to increase the methylphenidate plasma concentration of a subject being treated over a period of about 6-16 hours, followed by a steady decrease in the plasma concentration of methylphenidate.

30. The method according to claim 29, wherein the increasing plasma concentration over about 6-16 hours is followed by a steady decrease in the plasma concentration of methylphenidate over a period of at least about 8 hours.

31. The method according to claim 29, wherein said increase in said methylphenidate plasma concentration occurs over a period of about 6-12 hours.

32. The method according to claim 29, wherein said increasing plasma concentration is in the range of 0.06 (ng/mL)/hour to 6.0 (ng/mL)/hour.

33. The method according to claim 29, wherein said composition comprises no more than about 5% weight/weight of acid functional monomers.

34. The method according to claim 29, wherein said composition is substantially free of ritalinic acid at the time of manufacture.

35. The method according to claim 29, wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 24 hours.

36. The method according to claim 29, wherein wherein said composition delivers a therapeutically effective amount over a period of time of about 12 to about 18 hours.

37. The method according to claim 29, wherein the methylphenidate is delivered at a rate of about at least 5 mg per 24 hours.

38. The method according to claim 20, wherein said increase in said methylphenidate plasma concentration occurs over a period of about 6-12 hours.